

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/220,617DATE: 02/04/1999  
TIME: 12:31:37

INPUT SET: S30481.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

## SEQUENCE LISTING

ENTERED

## (1) General Information:

(i) APPLICANT: JOHNSON, EUGENE M  
MILBRANDT, JEFFREY D  
KOTZBAUER, PAUL T  
LAMPE, PATRICIA A  
KLEIN, ROBERT  
DESAUVAGE, FRED

(ii) TITLE OF INVENTION: PERSEPHIN AND RELATED GROWTH FACTOR

(iii) NUMBER OF SEQUENCES: 239

## (iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: HOWELL & HAFERKAMP, L.C.  
(B) STREET: 7733 FORSYTH BOULEVARD, SUITE 1400  
(C) CITY: ST. LOUIS  
(D) STATE: MO  
(E) COUNTRY: USA  
(F) ZIP: 63105

## (v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk  
(B) COMPUTER: IBM PC compatible  
(C) OPERATING SYSTEM: PC-DOS/MS-DOS  
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

## (vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 09/220,617  
(B) FILING DATE:  
(C) CLASSIFICATION: 435

## (vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: US/08/931,858  
(B) FILING DATE:

## (viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: HOLLAND, DONALD R.  
(B) REGISTRATION NUMBER: 35,197  
(C) REFERENCE/DOCKET NUMBER: 6029-1486

## (ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 314-727-5188  
(B) TELEFAX: 314-727-6092

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/220,617DATE: 02/04/1999  
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47

48

49 (2) INFORMATION FOR SEQ ID NO:1:

50

51 (i) SEQUENCE CHARACTERISTICS:

52 (A) LENGTH: 102 amino acids

53 (B) TYPE: amino acid

54 (C) STRANDEDNESS:

55 (D) TOPOLOGY: linear

56

57 (ii) MOLECULE TYPE: protein

58

59

60

61 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

62

63 Ala Arg Leu Gly Ala Arg Pro Cys Gly Leu Arg Glu Leu Glu Val Arg  
64 1 5 10 1565 Val Ser Glu Leu Gly Leu Gly Tyr Ala Ser Asp Glu Thr Val Leu Phe  
66 20 25 30  
67  
68

69

70

71 Arg Tyr Cys Ala Gly Ala Cys Glu Ala Ala Ala Arg Val Tyr Asp Leu  
72 35 40 45

73

74 Gly Leu Arg Arg Leu Arg Gln Arg Arg Arg Leu Arg Arg Glu Arg Val  
75 50 55 60

76

77 Arg Ala Gln Pro Cys Cys Arg Pro Thr Ala Tyr Glu Asp Glu Val Ser  
78 65 70 75 80

79

80 Phe Leu Asp Ala His Ser Arg Tyr His Thr Val His Glu Leu Ser Ala  
81 85 90 95

82

83 Arg Glu Cys Ala Cys Val  
84 100

85

86 (2) INFORMATION FOR SEQ ID NO:2:

87

88 (i) SEQUENCE CHARACTERISTICS:

89 (A) LENGTH: 100 amino acids

90 (B) TYPE: amino acid

91 (C) STRANDEDNESS:

92 (D) TOPOLOGY: linear

93

94 (ii) MOLECULE TYPE: protein

95

96

97

98 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

99

# RAW SEQUENCE LISTING PATENT APPLICATION US/09/220,617

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TIME: 12:31:38

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100   Pro Gly Ala Arg Pro Cys Gly Leu Arg Glu Leu Glu Val Arg Val Ser
101   1             5             10             15
102
103   Glu Leu Gly Leu Gly Tyr Thr Ser Asp Glu Thr Val Leu Phe Arg Tyr
104             20             25             30
105
106   Cys Ala Gly Ala Cys Glu Ala Ala Ile Arg Ile Tyr Asp Leu Gly Leu
107             35             40             45
108
109   Arg Arg Leu Arg Gln Arg Arg Arg Val Arg Arg Glu Arg Ala Arg Ala
110             50             55             60
111
112   His Pro Cys Cys Arg Pro Thr Ala Tyr Glu Asp Glu Val Ser Phe Leu
113             65             70             75             80
114
115   Asp Val His Ser Arg Tyr His Thr Leu Gln Glu Leu Ser Ala Arg Glu
116             85             90             95
117
118   Cys Ala Cys Val
119             100
120

```

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 16 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /note= "ANY AMINO ACID"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

```

140   Ser Gly Ala Arg Pro Xaa Gly Leu Arg Glu Leu Glu Val Ser Val Ser
141   1             5             10             15
142
143

```

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/220,617DATE: 02/04/1999  
TIME: 12:31:38

INPUT SET: S30481.raw

153  
154  
155 (ix) FEATURE:  
156 (A) NAME/KEY: Modified-site  
157 (B) LOCATION: 1  
158 (D) OTHER INFORMATION: /note= "ANY AMINO ACID"  
159  
160 (ix) FEATURE:  
161 (A) NAME/KEY: Modified-site  
162 (B) LOCATION: 6  
163 (D) OTHER INFORMATION: /note= "SERINE OR CYSTEINE"  
164  
165  
166 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:  
167  
168 Xaa Cys Ala Gly Ala Xaa Glu Ala Ala Val  
169 1 5 10  
170  
171 (2) INFORMATION FOR SEQ ID NO:5:  
172  
173 (i) SEQUENCE CHARACTERISTICS:  
174 (A) LENGTH: 23 amino acids  
175 (B) TYPE: amino acid  
176 (C) STRANDEDNESS:  
177 (D) TOPOLOGY: linear  
178  
179 (ii) MOLECULE TYPE: peptide  
180  
181  
182 (ix) FEATURE:  
183 (A) NAME/KEY: Modified-site  
184 (B) LOCATION: 1  
185 (D) OTHER INFORMATION: /note= "ANY AMINO ACID"  
186  
187 (ix) FEATURE:  
188 (A) NAME/KEY: Modified-site  
189 (B) LOCATION: 2  
190 (D) OTHER INFORMATION: /note= "ANY AMINO ACID"  
191  
192 (ix) FEATURE:  
193 (A) NAME/KEY: Modified-site  
194 (B) LOCATION: 17  
195 (D) OTHER INFORMATION: /note= "GLUTAMINE OR GLUTAMIC ACID"  
196  
197  
198 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:  
199  
200 Xaa Xaa Val Glu Ala Lys Pro Cys Cys Gly Pro Thr Ala Tyr Glu Asp  
201 1 5 10 15  
202  
203 Xaa Val Ser Phe Leu Ser Val  
204 20  
205

RAW SEQUENCE LISTING  
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INPUT SET: S30481.raw

206 (2) INFORMATION FOR SEQ ID NO:6:

207

208 (i) SEQUENCE CHARACTERISTICS:

209 (A) LENGTH: 10 amino acids

210 (B) TYPE: amino acid

211 (C) STRANDEDNESS:

212 (D) TOPOLOGY: linear

213

214 (ii) MOLECULE TYPE: peptide

215

216

217

218 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

219

220 Tyr His Thr Leu Gln Glu Leu Ser Ala Arg

221 1 5 10

222

223 (2) INFORMATION FOR SEQ ID NO:7:

224

225 (i) SEQUENCE CHARACTERISTICS:

226 (A) LENGTH: 197 amino acids

227 (B) TYPE: amino acid

228 (C) STRANDEDNESS:

229 (D) TOPOLOGY: linear

230

231 (ii) MOLECULE TYPE: protein

232

233

234

235 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

236

237 Met Gln Arg Trp Lys Ala Ala Ala Leu Ala Ser Val Leu Cys Ser Ser

238 1 5 10 15

239

240 Val Leu Ser Ile Trp Met Cys Arg Glu Gly Leu Leu Leu Ser His Arg

241 20 25 30

242

243 Leu Gly Pro Ala Leu Val Pro Leu His Arg Leu Pro Arg Thr Leu Asp

244 35 40 45

245

246 Ala Arg Ile Ala Arg Leu Ala Gln Tyr Arg Ala Leu Leu Gln Gly Ala

247 50 55 60

248

249 Pro Asp Ala Met Glu Leu Arg Glu Leu Thr Pro Trp Ala Gly Arg Pro

250 65 70 75 80

251

252 Pro Gly Pro Arg Arg Arg Ala Gly Pro Arg Arg Arg Arg Ala Arg Ala

253 85 90 95

254

255 Arg Leu Gly Ala Arg Pro Cys Gly Leu Arg Glu Leu Glu Val Arg Val

256 100 105 110

257

258 Ser Glu Leu Gly Leu Gly Tyr Ala Ser Asp Glu Thr Val Leu Phe Arg

PAGE: 1

**SEQUENCE VERIFICATION REPORT**  
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*INPUT SET: S30481.raw*

Line	Error	Original Text
33	Wrong Classification	(C) CLASSIFICATION:435